## Most States Lose Under H.R. 2454

Consumers in red colored states will pay more for electricity to make up for the shortfall in allowances (dollars in millions).

Based on the allowance allocation formula in H.R. 2454 for electricity consumers, the red states will not have enough allowances to cover their emissions from electricity generation. The shortfall in allowances to the red states will lead to higher electricity costs for consumers, the total of which will roughly correlate with the dollar losses noted on the map. For example, Texas electricity consumers will see electricity costs go up by roughly $\$ 1$ billion. To make up the shortfall, red states will have to seek high-cost, non-CO2 emitting electricity sources, reduce electricity production and consumption, or purchase allowances from the green states, or purchase domestic and international offsets, likely a combination of the three.


Based on Energy Information Administration (EIA) and Congressional Budget Office (CBO) data.
Dollars in millions. Approximate cost to customers in 2012 (at CBO estimate of $\$ 15 /$ ton).
For supporting data, see next page.

| State | CO2 Emissions from Electricity Generation (metric tons) |  |  |  |  |  | Electricity Sales (megawatthours) |  |  |  |  |  | Metric Tons of Permits Allocated (in 2012) | Metric Tons of permits short | Cost to Customers in 2012 (at CBO estimate of $\$ 15 /$ ton) | State |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2006 | 2007 |  | Average (2006-08) | Avg as \% of U.S. Total | Distribution (50\%) | 2006 | 2007 |  | Average (2006-08) | Avg. as \% of U.S | ution (50\%) 2 |  |  |  |  |
| AK | 4,584,736 | 4,301,706 | 4,121,076 | 4,335,839 | 0.175\% | 1594927.02 | 6,182,291 | 6,326,610 | 6,313,473 | 6,274,125 | 0.169\% | 1536592.41 | 3,131,519 | -1,204,320 | -\$18,064,797 | AK |
| AL | 85,116,255 | 87,344,975 | 82,217,856 | 84,893,029 | 3.428\% | 31227676.61 | 90,677,695 | 91,828,464 | 89,199,251 | $90,568,470$ | 2.435\% | 22181074.04 | 53,408,751 | -31,484,278 | -\$472,264,169 | AL |
| AR | 28,494,446 | 29,852,236 | 30,166,924 | 29,504,535 | - 1.191\% | 10853165.48 | 46,635,624 | 47,054,891 | 46,201,216 | 46,630,577 | 1.254\% | 11420268.90 | 22,273,434 | -7,231,101 | -\$108,466,514 | AR |
| AZ | 53,353,217 | 55,778,500 | 57,900,643 | 55,677,453 | 2.248\% | 20480804.32 | 73,252,776 | 77,193,206 | 76,434,088 | 75,626,690 | 2.033\% | 18521690.94 | 39,002,495 | -16,674,958 | -\$250,124,371 | AZ |
| CA | 59,389,043 | 62,780,179 | 63,534,254 | 61,901,159 | 2.500\% | 22770177.94 | 262,958,528 | 264,234,911 | 267,091,566 | 264,761,668 | 7.118\% | 64842634.19 | 87,612,812 | 25,711,653 | \$385,674,801 | CA |
| co | 41,847,348 | 42,989,936 | 41,250,539 | 42,029,274 | - 1.697\% | 15460357.71 | 49,733,698 | 51,299,156 | 51,371,953 | 50,801,602 | 1.366\% | 12441792.41 | 27,902,150 | -14,127,124 | \$211,906,864 | co |
| CT | 11,056,606 | 10,361,669 | 8,813,515 | 10,077,263 | 0.407\% | 3706894.76 | 31,677,453 | 34,129,107 | 33,660,101 | 33,155,554 | 0.891\% | 8120108.36 | 11,827,003 | 1,749,740 | \$26,246,096 | CT |
| DC | 99,085 | 85,166 | 69,157 | 84,469 | 0.003\% | 31071.79 | 11,396,424 | 12,110,185 | 11,616,232 | 11,707,614 | 0.315\% | 2867305.21 | 2,898,377 | 2,813,908 | \$42,208,616 | DC |
| DE | 5,885,175 | 7,223,767 | 6,519,329 | 6,542,757 | 0.264\% | 2406735.87 | 11,554,672 | 11,868,810 | 11,727,551 | 11,717,011 | 0.315\% | 2869606.70 | 5,276,343 | -1,266,414 | -\$18,996,215 | DE |
| FL | 126,528,977 | 127,662,330 | 118,983,664 | 124,391,657 | 5.023\% | 45757142.88 | 228,219,544 | 231,084,600 | 226,987,440 | 228,763,861 | 6.150\% | 56026431.12 | 101,783,574 | -22,608,083 | - $\$ 339,121,245$ | FL |
| GA | 89,897,929 | 95,248,726 | 89,055,354 | 91,400,670 | 3.691\% | 33621495.26 | 134,834,168 | 137,453,878 | 135,243,879 | 135,843,975 | 3.652\% | 33269473.00 | 66,890,968 | -24,509,702 | -\$367,645,523 | GA |
| Hi | 9,036,354 | 8,933,935 | 8,252,130 | 8,740,806 | - $0.353 \%$ | 3215282.57 | 10,567,912 | 10,585,299 | 10,390,008 | 10,514,406 | 0.283\% | 2575077.46 | 5,790,360 | -2,950,446 | -\$44,256,695 | Hi |
| IA | 40,577,052 | 43,858,798 | 46,051,480 | 43,495,777 | - 1.756\% | 15999806.65 | 43,336,835 | 45,269,523 | 44,767,963 | 44,458,107 | 1.195\% | 10888210.47 | 26,888,017 | -16,607,759 | -\$249,116,391 | IA |
| ID | 875,322 | 1,273,975 | 1,230,640 | 1,126,646 | 0.045\% | 414433.62 | 22,761,749 | 23,755,186 | 23,910,621 | 23,475,852 | 0.631\% | 5749457.97 | 6,163,892 | 5,037,246 | \$75,558,689 | ID |
| 1 L | 99,479,401 | 104,619,546 | 104,203,670 | 102,767,539 | 4.150\% | 37802768.07 | 142,447,811 | 146,055,151 | 144,754,607 | 144,419,190 | 3.883\% | 35369624.10 | 73,172,392 | -29,595,147 | -\$443,927,201 | IL |
| IN | 121,950,248 | 121,724,872 | 122,485,813 | 122,053,644 | 4.929\% | 44897111.14 | 105,664,484 | 109,420,150 | 106,502,322 | 107,195,652 | 2.882\% | 26253228.01 | 71,150,339 | -50,903,305 | -\$763,549,580 | IN |
| KS | 35,639,431 | 38,926,886 | 36,814,141 | 37,126,819 | - $1.499 \%$ | 13657002.52 | 39,751,302 | 40,165,977 | 38,650,422 | 39,522,567 | 1.063\% | 9679450.09 | 23,336,453 | -13,790,367 | -\$206,855,500 | KS |
| KY | 93,160,139 | 92,320,191 | 93,300,734 | 92,927,021 | 3.752\% | 34182959.69 | 88,743,435 | 92,404,100 | 94,704,809 | 91,950,781 | 2.472\% | 22519615.15 | 56,702,575 | -36,224,447 | -\$543,366,699 | KY |
| LA | 54,098,020 | 54,289,959 | 54,645,426 | 54,344,468 | 2.194\% | 19990469.27 | 77,467,748 | 79,566,937 | 78,578,111 | 78,537,599 | 2.112\% | 19234599.98 | 39,225,069 | -15,119,399 | -\$226,790,985 | LA |
| MA | 23,707,582 | 25,538,756 | 21,400,903 | 23,549,080 | 0.951\% | 8662467.11 | 55,850,090 | 57,138,822 | 55,682,477 | 56,223,796 | 1.512\% | 13769738.95 | 22,432,206 | -1,116,874 | -\$16,753,115 | MA |
| MD | 30,496,966 | 31,165,417 | 28,558,935 | 30,073,773 | - 1.214\% | 11062557.92 | 63,173,143 | 65,390,660 | 63,410,981 | 63,991,595 | 1.720\% | 15672146.16 | 26,734,704 | -3,339,069 | -\$50,086,028 | MD |
| ME | 5,635,313 | 5,565,587 | 4,910,245 | 5,370,382 | 0.217\% | 1975480.77 | 12,284,768 | 11,860,202 | 12,771,750 | 12,305,573 | 0.331\% | 3013751.18 | 4,989,232 | -381,150 | -\$5,717,248 | me |
| мı | 75,633,484 | 79,090,202 | 76,232,050 | 76,985,245 | 3.109\% | 28318819.41 | 108,017,697 | 109,296,749 | 105,683,362 | 107,665,936 | 2.895\% | 26368405.01 | 54,687,224 | -22,298,021 | -\$334,470,314 | мı |
| MN | 37,564,924 | 37,706,385 | 36,003,520 | 37,091,610 | - 1.498\% | 13644050.80 | 66,769,931 | 68,231,182 | 67,629,743 | 67,543,619 | 1.816\% | 16542070.40 | 30,186,121 | -6,905,489 | -\$103,582,328 | MN |
| мо | 79,101,901 | 77,131,256 | 76,704,214 | 77,645,790 | 3.135\% | 28561799.08 | 82,015,230 | 85,532,850 | 84,102,860 | 83,883,647 | 2.255\% | 20543897.64 | 49,105,697 | -28,540,093 | \$428,101,402 | мо |
| MS | 25,802,259 | 27,764,176 | 25,881,766 | 26,482,734 | - 1.069\% | 9741603.67 | 46,936,437 | 48,153,181 | 48,101,620 | 47,730,413 | 1.283\% | 11689629.04 | 21,431,233 | -5,051,501 | -\$75,772,512 | MS |
| mт | 19,086,919 | 20,012,990 | 19,871,958 | 19,657,289 | 0.794\% | 7230881.88 | 13,814,980 | 15,531,985 | 17,478,939 | 15,608,635 | 0.420\% | 3822702.11 | 11,053,584 | -8,603,705 | -\$129,055,574 | мт |
| NC | 73,138,096 | 78,533,282 | 75,133,537 | 75,601,638 | 3.053\% | 27809863.26 | 126,698,979 | 131,880,754 | 130,026,236 | 129,535,323 | 3.483\% | 31724424.52 | 59,534,288 | -16,067,351 | -\$241,010,260 | NC |
| ND | 31,266,847 | 31,985,187 | 32,261,824 | 31,837,953 | 3 1.286\% | 11711506.91 | 11,245,238 | 11,905,695 | 13,186,339 | 12,112,424 | 0.326\% | 2966447.08 | 14,677,954 | -17,159,999 | -\$257,399,981 | ND |
| NE | 22,293,088 | 20,645,874 | 22,131,927 | 21,690,296 | - $0.876 \%$ | 7978718.27 | 27,276,292 | 28,248,400 | 28,680,489 | 28,068,394 | 0.755\% | 6874214.81 | 14,852,933 | -6,837,363 | -\$102,560,448 | NE |
| NH | 7,064,969 | 6,848,507 | 6,646,458 | 6,853,311 | 0.277\% | 2520972.48 | 11,094,343 | 11,235,856 | 10,973,542 | 11,101,247 | 0.298\% | 2718800.28 | 5,239,773 | -1,613,539 | -\$24,203,078 | NH |
| NJ | 19,861,416 | 20,585,235 | 19,802,200 | 20,082,950 | 0.811\% | 7387460.33 | 79,680,947 | 81,934,334 | 78,919,628 | 80,178,303 | 2.156\% | 19636423.97 | 27,023,884 | 6,940,934 | \$104,14,008 | NJ |
| NM | 33,050,618 | 31,452,437 | 30,226,301 | 31,576,452 | 1.275\% | 11615314.62 | 21,434,957 | 22,267,394 | 22,126,980 | 21,943,110 | 0.590\% | 5374075.05 | 16,989,390 | -14,587,062 | -\$218,805,937 | NM |
| NV | 16,619,587 | 16,778,142 | 18,104,122 | 17,167,284 | 0.693\% | 6314940.07 | 34,586,260 | 35,643,402 | 35,223,613 | 35,151,092 | 0.945\% | 8608834.47 | 14,923,775 | -2,243,509 | -\$33,652,639 | NV |
| NY | 50,961,144 | 53,262,343 | 45,388,415 | 49,870,634 | 2.014\% | 18344781.20 | 142,238,019 | 148,177,523 | 144,382,513 | 144,932,685 | 3.897\% | 35495383.95 | 53,840,165 | 3,969,531 | \$59,542,965 | NY |
| OH | 129,010,185 | 130,407,085 | 127,635,113 | 129,017,461 | 5.210\% | 47458732.67 | 153,428,844 | 161,770,827 | 159,142,629 | 158,114,100 | 4.251\% | 38723637.03 | 86, 182,370 | -42,835,091 | -\$642,526,369 | OH |
| OK | 52,241,890 | 51,388,701 | 53,773,928 | 52,468,173 | 2.119\% | 19300279.04 | 54,905,314 | 55,193,200 | 55,436,867 | 55,178,460 | 1.483\% | 13513726.29 | 32,814,005 | -19,654,168 | -\$294,812,516 | OK |
| OR | 7,087,812 | 10,558,882 | 10,854,701 | 9,500,465 | 0.384\% | 3494721.00 | 48,069,265 | 48,696,965 | 49,007,565 | 48,591,265 | 1.306\% | 11900459.91 | 15,395,181 | 5,894,716 | \$88,420,738 | OR |
| PA | 125,864,000 | 127,888,320 | 121,304,825 | 125,019,048 | 5.048\% | 45987927.07 | 146,150,358 | 151,572,950 | 150,357,338 | 149,360,215 | 4.016\% | 36579727.97 | 82,567,655 | -42,451,393 | -\$636,770,897 | PA |
| RI | 2,512,890 | 2,946,005 | 3,098,177 | 2,852,357 | 0.115\% | 1049232.15 | 7,799,126 | 8,013,022 | 7,783,968 | 7,865,372 | 0.211\% | 1926303.92 | 2,975,536 | 123,179 | \$1,847,680 | RI |
| SC | 40,847,199 | 42,107,344 | 41,975,741 | 41,643,428 | 1.682\% | 15318425.12 | 80,877,321 | 81,948,158 | 80,635,984 | 81,153,821 | 2.182\% | 19875337.55 | 35,193,763 | -6,449,665 | -\$96,744,979 | SC |
| SD | 3,525,560 | 3,019,701 | 3,951,183 | 3,498,815 | 0.141\% | 1287029.72 | 10,056,387 | 10,603,301 | 10,952,734 | 10,537,474 | 0.283\% | 2580726.95 | 3,867,757 | 368,942 | \$5,534,131 | SD |
| TN | 61,379,959 | 60,837,496 | 58,209,242 | 60,142,232 | 2.429\% | 22123161.49 | 103,931,744 | 106,716,934 | 104,206,080 | 104,951,586 | 2.822\% | 25703635.05 | 47,826,797 | -12,315,436 | \$184,731,536 | TN |
| TX | 257,552,167 | 255,092,183 | 249,781,489 | 254,141,946 | - 10.263\% | 93485444.54 | 342,724,213 | 343,828,582 | 334,775,042 | 340,442,612 | 9.153\% | 83377612.43 | 176,863,057 | -77,278,889 | -\$1,159,183,341 | TX |
| UT | 36,445,051 | 38,486,267 | 39,087,256 | 38,006,191 | 1.535\% | 13980477.21 | 26,365,716 | 27,785,447 | 28,088,685 | 27,413,283 | 0.737\% | 6713771.94 | 20,694,249 | -17,311,942 | -\$259,679,132 | UT |
| va | 42,067,790 | 46,721,552 | 40,689,972 | 43,159,771 | 1.743\% | 15876208.07 | 106,721,241 | 111,569,552 | 110,216,920 | 109,502,571 | 2.944\% | 26818214.27 | 42,694,422 | -465,349 | -\$6,980,236 | va |
| vt | 10,172 | 9,980 | 7,068 | 9,073 | 0.000\% | 3337.60 | 5,795,029 | 5,864,006 | 5,743,614 | 5,800,883 | 0.156\% | 1420691.06 | 1,424,029 | 1,414,955 | \$21,224,330 | vt |
| WA | 10,359,523 | 12,651,998 | 13,456,751 | 12,156,091 | - 0.491\% | 4471585.89 | 85,033,335 | 85,741,947 | 90,147,249 | 86,974,177 | 2.338\% | 21300797.72 | 25,772,384 | 13,616,293 | \$204,244,394 | WA |
| wi | 48,250,873 | 48,842,014 | 50,143,500 | 49,078,796 | - 1.982\% | 18053505.47 | 69,820,749 | 71,301,300 | 70,008,276 | 70,376,775 | 1.892\% | 17235937.15 | 35,289,443 | -13,789,353 | -\$206,840,294 | wi |
| wv | 85,075,494 | 86,273,654 | 84,102,137 | 85,150,428 | 3.438\% | 31322360.49 | 32,312,126 | 34,183,839 | 34,203,311 | 33,566,425 | 0.902\% | 8220734.72 | 39,543,095 | -45,607,333 | -\$684,109,999 | wv |
| wy | 45,215,551 | 45,705,725 | 45,902,023 | 45,607,766 | - 1.842\% | 16776696.52 | 14,946,612 | 15,535,552 | 16,826,659 | 15,769,608 | 0.424\% | 3862125.92 | 20,638,822 | -24,968,944 | -\$374,534,158 | wy |
| Total US | 2,459,800,013 | 2,516,580,035 | 2,452,847,826 | 2,476,409,291 | 1 100.00\% |  | 3,669,918,840 | 3,764,560,712 | 3,724,019,606 | 3,719,499,719 | 100.00\% |  | 1,821,881,250 | -654,528,041 | -\$9,817,920,619 | Total Us |

These rough calculations DO NOT represent a precise indicator of the actual allocation of allowances to electricity distribution companies under sections 782 and 783 of the ACES legislation (5-29-2009 version). First, power can and does move across state lines, so the share electricity-related of carbon dioxide emissions associated with power generation within a state may differ from the share of carbon dioxide emissions associated with power sale within that state - -it is the latter that is used in the ACES formula as we understand it, but the former that is calculated here. Second, the distribution under ACES is done on a utility-by-utility basis rather than a state-by-state
basis, and there can be significant differences across utilities within a given state. Third, these calculations are made based on data for 2006 through 2008 (2008 data is unpublished preliminary data), while the ACES legislation allows the affected electricity sellers the option of choosing a different period within a specified range of dates. Finally, the calculations do not cover many of the detailed legislative provisions dealing with allocation.

This assumes that
emissions in 2012
will equal the
average for 2006
2008 - a very
The states with positive
amounts get more permits than they need ough estimate tha
lakes into account
neither increased
useage from
economic growth
nor possible
efficiency gains.

